

# Sheet (Function)

1. Write a program that reads two integer numbers from a user and call a function to add these two numbers and call another function to sub these numbers using global variables.
2. Write a program that reads two integer numbers from a user and call a function to add these two numbers and call another function to sub these numbers using local variables.
3. Write a program to calculate the result of the following equation using two functions only  
$$((3+4+5+6)/(9*11*13*15) - (7*10*13*...*19)/(10+15+20+...+40))$$
4. Write a function to calculate factorial of any number , then write a program to calculate :  
 $a!+b!-c!$  ,using a loop and another without using any loops (recursion)
5. Write a program to add numbers from 1 to 1000 .Don't use any loop or using recursion.
6. Write a program to read a positive number and then test the number is prime or not using function.
7. Write a program to print the following pattern

```
#####  
#####  
#####  
#####  
HELLO  
#####  
#####  
#####  
BYEBYE  
#####  
#####  
HELLO
```

**####**  
**BYEBYE**

**8. Write a program to count and print number of zeros in an integer number which will entered by the user using a function**  
**// 1 use loop**  
**// 2 use recursion**